

Amendments to Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-29 (cancelled)

30. (currently amended) ~~The method of claim 29 further comprising~~ A method for dynamically adding a device driver into a layered stack of device drivers in a computer system comprising:

suspending I/O operations for the layered stack;

unbinding an upper driver in the stack from a lower driver in the stack, wherein the lower driver emulates a device, the device having a first device name;

binding the device driver to the lower driver to form a layered device, wherein upon forming the layered device, the layered device is given a second device name different than the first device name;

binding the upper driver to the layered device;

exporting the layered device under the second device name to the upper driver for use in the layered stack; and

restarting I/O operations for the layered stack.

31. (currently amended) ~~The method of claim 29~~ A method for dynamically adding a device driver into a layered stack of device drivers in a computer system comprising:

suspending I/O operations for the layered stack;

unbinding an upper driver in the stack from a lower driver in the stack, wherein the lower driver emulates a device, the device having a first device name;

binding the device driver to the lower driver to form a layered device wherein upon forming the layered device, the layered device is given a second device name different than the first device name, wherein the first device name and the second device name are unique to a particular stage of re-layering;

binding the upper driver to the layered device; and

restarting I/O operations for the layered stack.

32. (currently amended) ~~The method of claim 29~~ A method for dynamically adding a device driver into a layered stack of device drivers in a computer system comprising:

suspending I/O operations for the layered stack;

unbinding an upper driver in the stack from a lower driver in the stack, wherein the lower driver emulates a device, the device having a first device name;

binding the device driver to the lower driver to form a layered device wherein upon forming the layered device, the layered device is given a second device name different than the first device name, wherein the first device name and the second device name are unique across all stages of re-layering;

binding the upper driver to the layered device; and

restarting I/O operations for the layered stack.

33. (currently amended) The method of claim 2730, wherein the computer system is a computer storage system, and wherein the layered stack is a logical unit input/output stack.

34. (cancelled)

35. (currently amended) ~~The method of claim 34,~~ A method for dynamically adding a device driver into a layered stack of device drivers in a computer system having an operating system and a layered device driver registration system, wherein the layered device driver registration system comprises a driver list and a driver order file, ~~and wherein registering the device driver with the layered device driver registration system comprises:~~ said method comprising:

registering the device driver with the operating system;

registering the device driver with the layered device driver registration system by adding the device driver to the driver list; and specifying in the driver order file a relative position for the device driver within the layered stack;

suspending I/O operations for the layered stack;

unbinding an upper driver in the stack from a lower driver in the stack;

binding the device driver to the lower driver to form a layered device;

binding the upper driver to the layered device; and

restarting I/O operations for the layered stack.

36. (previously presented) The method of claim 35, wherein adding the device driver to the driver list comprises adding a first key to a driver file maintained by the layered device driver registration system, said first key including a driver name for the device driver and a library name indicating an administrative library for the device driver, and wherein specifying the relative position for the device driver within the layered stack comprises adding a second key to a driver order file maintained by the layered device driver registration system, said second key including a driver name for the device driver and an ordinal value indicating the relative position of the device driver within the layered stack.

Claims 37-41 (cancelled)

42. (new) The method of claim 31, wherein the computer system is a computer storage system, and wherein the layered stack is a logical unit input/output stack.

43. (new) The method of claim 32, wherein the computer system is a computer storage system, and wherein the layered stack is a logical unit input/output stack.

44. (new) The method of claim 35, wherein the computer system is a computer storage system, and wherein the layered stack is a logical unit input/output stack.